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United States Nuclear Regulatory Commission

Protecting People and the Environment

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2016



RAMP Recent Developments

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 March 8, 2016



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RAMP Topic Overview

- Need for RAMP
- SECY 2014-0117
- Launched in March 2015 – Happy Birthday!
- Computer Codes in RAMP
- International Agreements and Activities
- RAMP Users’ Meetings
- Future of RAMP
- RAMP Team Contacts



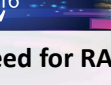
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Need for RAMP

- Recognized code issues
- Customer relationship management
- Communication with users was infrequent or not well established
- Consistency processes and resolution of code issues
- Obtain user-endorsed roadmap for codes
- Limited NRC resources to address issues and/or improve codes

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SECY 1014-0117

Describes staff integrated plan for developing, maintaining, and distributing the NRC's radiation protection, dose assessment, and emergency response computer codes.

1. Brief History of Radiation Protection Code Development
2. RAMP Mission and Vision
3. Participation in RAMP
4. Alternatives considered

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March 2015 - RAMP is Launched!!!!!!

<https://www.usnrc-ramp.com/>

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Computer Codes

RAMP - At A Glance



- RAMP: ~300
- RASCAL: ~130
- VARSKIN: ~200
- Users' Forum
- Code Documentation
- Training Modules
- Support






RAMP International Agreements and Activities








RAMP International Agreements and Activities

Member contributions have saved NRC resources and improved the codes. The larger user community and range of applications help to identify code problems and improved modeling approaches.

Examples include:

- Identifying code errors
- Plant modeling for new applications
- Improvement to code models

RAMP Users' Meetings

- 1st RAMP User Meeting – October 2015
- 2016 RAMP Users' Meetings
 - South Africa, May 16-20, 2016
 - Near NRC Headquarters, October 2016
- 2017 RAMP Users' Meeting
 - Targeting Asia - Taiwan, South Korea or Japan, Spring 2017
 - Near NRC Headquarters, Fall 2017
- 2018 RAMP Users' Meeting
 - Targeting Europe – Spain or IAEA Headquarters
 - Near NRC Headquarters, Fall 2018
- 2019 RAMP Users' Meeting
 - Targeting the Middle East – UAE
 - Near NRC Headquarters, Fall 2019




1st RAMP Users' Meeting Highlights




Mike Weber welcoming everyone Getting to know each other



RAMP Team and International Participants








Engaged in trainings discussions






Establishing Sustainable Relationships







Building networks through RAMP!

Future of RAMP

- Additional Codes
 - Atmospheric Codes – PAVAN, ARCON 96, XOQDOQ
 - MILDOS – AREA, RESRAD(?)
- Code Development Direction
 - Code Compatible
 - Consistent Documentation:
 - Theory Manual, User Guide, etc.
- Combine Codes for Greater Efficiencies
- Maintenance

Future of RAMP

- Update the Software Quality Assurance Program
- Staying abreast of current models and methods
 - ICRP
 - Country specific reactor types
 - International units of measurement
 - Other country specific needs
- Develop online training and information modules
 - More RASCAL Modules, VARSKIN, RADTRAD
 - Health Physics and Radiation Safety Training
- Meeting regulatory requirements
 - Section 508, ADA
 - Security and Safeguards




RAMP Team!



PNNL RAMP
Program Manager



RAMP Program Manager



Certified Health
Physicist



PNNL RAMP
Coordinator



Nuclear
Engineer



RAMP Website
Developer



NRC RAMP
Administrator



RAMP Website Manager



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